

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Rec'd PCT/PTC 16 MAR 2005

PCT/EP2003/010136



Applicant's or agent's file reference 345 P 354 PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/010136	International filing date (day/month/year) 11 September 2003 (11.09.2003)	Priority date (day/month/year) 16 September 2002 (16.09.2002)
International Patent Classification (IPC) or national classification and IPC H01Q 9/28		
Applicant KATHREIN-WERKE KG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 18 March 2004 (18.03.2004)	Date of completion of this report 02 December 2004 (02.12.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/010136

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-15, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages 6-11, as originally filed
 pages 1-5, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the drawings:
 pages 1-4, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/10136

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-11	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims		NO

2. Citations and explanations

1. This report makes reference to the following documents:

D2: XP002062352

D3: DE 35 04 719 A

D4: DE 34 05 044 C (mentioned in the application)

D5: US-A-4 381 566

D6: EP-A-0 254 373

D7: WO 02 067379 A

D8: EP1195899 A2

D9: DE 3150958 A1

Documents D8 and D9 were not cited in the international search report. Copies of these documents are attached.

2. The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 1 does not involve an inventive step (PCT Article 33(3)).

- 2.1 Document D2 is considered to constitute the prior art closest to the subject matter of claim 1 and discloses (the references in parentheses are to that

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document) :

an antenna assembly with a surface dipole arranged on a substrate (D2, figure 2a) and having the following features

- each of the mutually facing end zones of the dipole halves (D2, figure 2a) is electrically connected to its own connection line (D2, section 2.2, page 231),*
- the connection lines lead to two amplifiers (D2, figure 5b),*
- the outputs of both amplifiers are connected to the two inputs of a transmitter (D2, figure 5b) whose output is electrically connected at least indirectly to a connection, preferably a coaxial connection (D2, figure 5b),*
- a plurality of filters (D2, section 3.2, page 233) is provided,*
- the dipole halves are arranged, together with the amplifiers and filters, on a substrate (D2, section 2.2, page 231 and top of page 232),*
- the filter(s) (D2, section 3.2, page 233) is or are provided for suppressing mobile radio frequency ranges and/or for shielding against broadcast signals.*

2.2 The subject matter of claim 1 therefore differs from the known document D1 in that further filters are provided in claim 1.

2.3 The present invention can therefore be considered to address the problem of using a different amplifier and filter architecture.

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- 2.4 The solution proposed in claim 1 of the present application cannot be considered inventive (PCT Article 33(3)) for the following reasons:

All the filters used are conventional filters placed in positions which are obvious to a person skilled in the art and have an obvious effect in the circuit (see also D8, paragraph [0003] and figure 3). It should also be noted that the connection in series of two filters yields a single filter.

- 2.5 Document D9, which is cited for the first time in this report, is another document which contains all the elements of claim 1 integrated on a single substrate. It can also be regarded as the closest prior art, like D2. Claim 1 also fails to involve an inventive step in relation to D9.

- 2.6 Dependent claims 2-11 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT novelty and inventive step requirements; see documents D2-D7 and the corresponding passages indicated in the search report.

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